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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/660,212  | 09/11/2003  | William R. Belcourt  | 22873               | 6546             |
| 7590  | 04/19/2006  |                      | EXAMINER            |                  |
| Vaughn W. North<br>THORPE NORTH & WESTERN, LLP<br>P.O. Box 1219<br>Sandy, UT 84091-1219 |             |                      | WUJCIAK, ALFRED J   |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 3632                |                  |
| DATE MAILED: 04/19/2006   |             |                      |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                           |                     |
|------------------------------|---------------------------|---------------------|
| <b>Office Action Summary</b> | <b>Application No.</b>    | <b>Applicant(s)</b> |
|                              | 10/660,212                | BELCOURT ET AL.     |
|                              | <b>Examiner</b>           | <b>Art Unit</b>     |
|                              | Alfred Joseph Wujciak III | 3632                |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 13 February 2006.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-4, 7-27 and 30-33 is/are rejected.
- 7) Claim(s) 5,6,28 and 29 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 11 September 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

This is the first Office Action for the serial number 10/660,212, ICE SCREW HAVING BREAKAWAY OR FLEXING CRANK HANDLE, filed on 9/11/03.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 7-19, 21-27 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent # 5,782,442 to Kwak et al and in view of US Patent # 6,607,340 to Petzl et al. (prior art in figure 2).

Kwak et al. teaches an ice screw (figure 1) comprising a hollow shaft (20) having a plurality of screw threads (22), a hanger (40) coupled to the hollow shaft and a flexing crank handle (60) coupled to the hanger. The flexing crank handle functions as a crank arm and comprising a mechanism. The mechanism includes a crank support means (88) for attaching the flexing crank handle to the hanger, a flexing member (figure 7) operable with the crank support means, and a sleeve (64) rotatable about the flexing member. The flexing member comprises a compression spring (76) supported within the sleeve and pre-load using a plunger (78) attached to crank support means (62) that fits within the sleeve. The spring has a predetermined stiffness. The flexing member comprises a spiral spring. The flexing member comprises an internal coil spring. The crank support means is a rigid rod pivotally attached to the hanger and a flexible

material. The hanger comprises a flex boundary (94) that dictates the flex path of the flexing crank handle and supports the flexing crank handle in the resting (90) and plurality of flexed positions (92 and 94). The flex boundary comprises a flat and a radius portion. The sleeve is a rotating sleeve (col. 4, line 51) that rotates about the flexing member. The flexing crank handle reduces cross-loading of an attached carabiner (col. 4, line 6) by flexing. The flexing crank handle comprises bi-directional flexing (spring). The flexing crank handle comprises vector flexing. The flex boundary is a multi-vector flex boundary defined by a knob (80) coupled to the hanger, wherein the knob has a semi-spherical surface shape allowing the flexing crank handle to flex in any direction about the surface.

Kwak et al. teaches the flexing crank handle and crank support means but fails to teach the crank handle is being configured to displace by flex in any direction from a resting position to a plurality of flexed position and to automatically return to the resting position without the need for manual manipulation and crank support means being flexed. Petzl et al. (figure 2) teaches the crank handle (22-23) being configured to displace by flex in any direction from a resting position to a plurality of flexed position and to automatically return to the resting position without the need for manual manipulation and the crank support means being flexed (18). It would have been obvious for one of ordinary skill in the art at the time the invention was made to have modified Kwak et al.'s crank handle to displace by flex in any direction from resting position to a plurality of flexed positions along the hanger and crank support means with flexible material as taught by Petzl et al. to provide convenience for returning the crank handle in the resting position from operative position without the need of manual manipulation.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kwak et al. in view of Petzl et al. and in further view of US Patent Application Publication # 2002/0074443 to Murdock et al.

Kwak et al. teaches the rotating sleeve but fails to teach the rotating sleeve comprises bearing. Murdock et al. teaches the rotating sleeve comprising bearing (29). It would have been obvious for one of ordinary skill in the art at the time the invention was made to have added the bearing to Kwak et al.'s rotating sleeve to provide efficient for rotating the sleeve about the flexing member.

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kwak et al. in view of Petzl et al.

Kwak et al. teaches an ice screw (figure 1) comprising a hollow shaft (20) having a plurality of screw threads (22), a hanger (40) coupled to the hollow shaft and a flexing crank handle (60) coupled to the hanger. The flexing crank handle functions as a crank arm and comprising a mechanism. The mechanism includes a crank support means (88) for attaching the flexing crank handle to the hanger, a flexing member (figure 7) operable with the crank support means, and a sleeve (64) rotatable about the flexing member. The flexing member comprises a compression spring (76) supported within the sleeve and pre-load using a plunger (78) attached to crank support means (62) that fits within the sleeve. The spring has a predetermined stiffness. The flexing member comprises a spiral spring. The flexing member comprises an internal coil spring. The crank support means is a rigid rod pivotally attached to the hanger and a flexible material. The hanger comprises a flex boundary (94) that dictates the flex path of the flexing

crank handle and supports the flexing crank handle in the resting (90) and plurality of flexed positions (92 and 94). The flex boundary comprises a flat and a radius portion. The sleeve is a rotating sleeve (col. 4, line 51) that rotates about the flexing member. The flexing crank handle reduces cross-loading of an attached carabiner (col. 4, line 6) by flexing. The flexing crank handle comprises bi-directional flexing (spring). The flexing crank handle comprises vector flexing. The flex boundary is a multi-vector flex boundary defined by a knob (80) coupled to the hanger, wherein the knob has a semi-spherical surface shape allowing the flexing crank handle to flex in any direction about the surface.

Kwak et al. teaches the flexing crank handle and crank support means but fails to teach the crank handle is being configured to displace by flex in any direction from a resting position to a plurality of flexed position and to automatically return to the resting position without the need for manual manipulation and crank support means being flexed. Petzl et al. (figure 2) teaches the crank handle (22-23) being configured to displace by flex in any direction from a resting position to a plurality of flexed position and to automatically return to the resting position without the need for manual manipulation and the crank support means being flexed (18). It would have been obvious for one of ordinary skill in the art at the time the invention was made to have modified Kwak et al.'s crank handle to displace by flex in any direction from resting position to a plurality of flexed positions along the hanger and crank support means with flexible material as taught by Petzl et al. to provide convenience for returning the crank handle in the resting position from operative position without the need of manual manipulation.

Kwak et al. in view of Petzl et al. teaches all elements but fails to teach the use of elements in method. It would have been obvious for one of ordinary skill in the art at the time the invention was made to have specified steps for screwing the ice screw into an ice body and attaching the carabiner to the screw to reduce the chance of accident when the ice screw is not proper installed.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1-33 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Allowable Subject Matter***

Claims 5-6 and 28-29 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

In regard to claims 5 and 28-29, the prior art fails to teach the flexing member comprises complimentary solid height coil springs attached opposite one another on the hanger. In regards to claim 6, the flexing member comprises a solid height coil spring attached within a recess formed in the hanger.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alfred Joseph Wujciak III whose telephone number is (571) 272-6827. The examiner can normally be reached on 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Olszewski can be reached on (571) 272-6815. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alfred Joseph Wujciak III  
Primary Examiner  
Art Unit 3632



4/13/06